## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-29. (Cancelled)

30. (Previously Presented) A computer-implemented method for eliminating bounceback behavior while performing a product configuration, the method comprising: receiving an input specifying a first domain member from a set of available domain members of a first variable;

propagating within a computer-implemented system constraints including propagating a first constraint over the input thereby eliminating a domain member of a second variable;

propagating a second constraint over the domain member of the second
variable thereby marking a second domain member as tentatively
eliminated from the set of available domain members of the first
variable; and

reinstating the second domain member to the set of available domain members by removing the tentative elimination marking unless

the input further includes specifying a domain member of a variable other than the first variable and

the second domain member of the first variable is also eliminated by constraint propagation over the domain member of the variable other than the first variable.

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- 31. (Previously Presented) The method of claim 30 further comprising:

  presenting a configuration page showing the set of available domain members of
  the first variable.
- 32. (Previously Presented) The method of claim 31 wherein reinstating the second domain member includes marking the second domain member as a conflicted choice in the configuration page.
- 33. (Previously Presented) The method of claim 30 wherein the product configuration is performed across a network.
- 34. (Previously Presented) The method of claim 30 further comprising initializing a bounceback detection bit vector for the second domain member of the first variable.
- 35. (Previously Presented) The method of claim 34 further comprising initializing an elimination flag for the second domain member of the first variable.
- 36. (Previously Presented) The method of claim 34 further comprising setting a bit position of the bounceback detection bit vector, the bit position corresponding to the first variable.

37. (Previously Presented) A system for performing a product configuration, comprising: a configuration engine adapted to

receive an input specifying a first domain member from a set of available domain members of a first variable;

propagate constraints including

propagate a first constraint over the input thereby eliminating a domain member of a second variable;

propagate a second constraint over the domain member of the second variable thereby marking a second domain member as tentatively eliminated from the set of available domain members of the first variable; and

a means for bounceback detection operatively coupled to the configuration engine and adapted to reinstate the second domain member to the set of available domain members by removing the tentative elimination marking unless the input further includes specifying a domain member of a variable other than the first variable and the second domain member of the first variable is also eliminated by constraint propagation over the domain member of the variable other than the first variable.

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- 38. (Previously Presented) The system of claim 37, further comprising:
  - a page generation module operatively coupled to the configuration engine and adapted to
    - generate a configuration page including the set of available domain members of the first variable, and provide the configuration page to a computer.
- 39. (Previously Presented) The system of claim 38 wherein the page generation module is further adapted to mark the second domain member as a conflicted choice in the configuration page after the second domain member has been reinstated by the bounceback detection means.